```
> s benzopyran?(l)cosmet?
        15591 BENZOPYRAN?
        84491 COSMET?
L2          66 BENZOPYRAN?(L)COSMET?

=> s l2 and (protein(l)kinas?)
       2020948 PROTEIN
        302816 KINAS?
        197878 PROTEIN(L)KINAS?
L3           0 L2 AND (PROTEIN(L)KINAS?)

=> s l2 and ((tyrosin?(l)kinase)or tie?)
        170077 TYROSIN?
        293509 KINASE
         52018 TYROSIN?(L)KINASE
         25150 TIE?
L4           0 L2 AND ((TYROSIN?(L)KINASE)OR TIE?)

=> s l2 and (antioxida? or (free(3w)radica?))
        156220 ANTIOXIDA?
       1316794 FREE
        393359 RADICA?
         99195 FREE(3W)RADICA?
L5           9 L2 AND (ANTIOXIDA? OR (FREE(3W)RADICA?))

=> d bib abs 1-9

L5   ANSWER 1 OF 9  CAPLUS  COPYRIGHT 2007 ACS on STN
AN   2007:510356  CAPLUS
DN   146:500737
TI   Functionalized phenolic compounds and absorbable polymers thereof and
     their preparation, pharmaceutical, cosmetic, and nutritional compositions,
     and use in implantable medical devices and treatment of diseases
IN   Bezwada, Rao S.
PA   Bezwada Biomedical LLC, USA
SO   PCT Int. Appl., 112pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 2
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    --------------------   --------
PI   WO 2007053794        A2    20070510    WO 2006-US60002        20061016
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,
             KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK,
             MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,
             RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
     US 2007141113         A1    20070621    US 2007-679191         20070227
PRAI US 2005-728823P       P     20051021
     WO 2006-US60002       A2    20061016
GI
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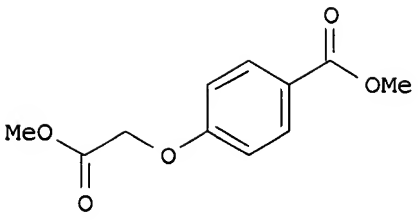

Ar–[O–(X)m–R']n I II

AB The invention relates to compds. of formula I, which are functionalized phenolic compds., and polymers formed from the same. Compds. of formula I wherein Ar-(O)n is phenolic residue; X is CH2CO2, CH(CH2)CO2, CH2CH2OCH2CO2, (CH2)yCO2, and (CH2CH2O)zCO2; y is 2, 3, 4, and 5; z is 6 t0 24; R' is H, Bn, and C1-6 alkyl; m is 0, 1, 2, 3, and 4; n is 1 to 10; provides that X is CH2CO2, CH(CH3)CO2 and (CH2)5CO2 when n is 1 and 2, then m is ≥ 2; are claimed. Polymers formed from the functionalized phenolics are expected to have controllable degradation profiles, enabling them to release an active component over a desired time range. The polymers are also expected to be useful in a variety of medical applications. Example compound II was prepared by etherification of Me 4-hydroxybenzoate with Me chloroacetate.

L5 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:837770 CAPLUS
DN 145:471301
TI 2',4'-dihydroxyflavone and derivatives thereof having skin-whitening, wrinkle-reducing, antiinflammatory and antioxidant activity
IN Cho, Young Ho; Kim, Chul Bae; Kim, Jin Hui; Lee, Bum Chun; Lee, Jeong Jae; Park, Sung Min; Pyo, Hyeong Bae
PA Hanbul Cosmetics Co., Ltd., S. Korea
SO Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DT Patent
LA Korean
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI KR 2005030495	A	20050330	KR 2003-67049	20030926
PRAI KR 2003-67049		20030926		

AB 2',4'-Dihydroxyflavone [i.e., 2-(2,4-dihydroxyphenyl)-4H-1-benzopyran-4-one] and derivs. thereof are provided. These compds. have inhibit tyrosinase activity, formation of melanin and matrix metalloprotease-1 (collagenase). Furthermore, they have antiinflammatory activity, antioxidant activity and they stimulate synthesis of collagen. They also have good stability in water in oil (W/O) or oil in water (O/W) formulations, so that the compds. can be useful for skin whitening and wrinkle-reducing cosmetics. The 2',4'-dihydroxyflavone derivs. are more narrowly defined; specifically mentioned are 2',4',5-trihydroxyflavone, 2',4',7-trihydroxyflavone, 2',4',5,7-tetrahydroxyflavone, 2',4'-dihydroxyflavonol, 2',4',5-trihydroxyflavonol or 2',4',7-trihydroxyflavonol. (no other addnl. information is provided here).

L5 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:299332 CAPLUS
DN 144:350402
TI Preparation of phenol-amide compounds by amidation of carboxylic acids with 2-aminoalkan-1-ols and their antioxidant properties for preventing biological degradation, and their use in cosmetics and pharmaceuticals
IN Adrian, Guy; Bigot, Patrick
PA Catalys, Fr.

SO Fr. Demande, 10 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI FR 2875803	A1	20060331	FR 2004-10098	20040924
FR 2875803	B1	20061124		
FR 2875806	A1	20060331	FR 2005-2475	20050314
FR 2875806	B1	20070209		
WO 2006035142	A1	20060406	WO 2005-FR2351	20050922

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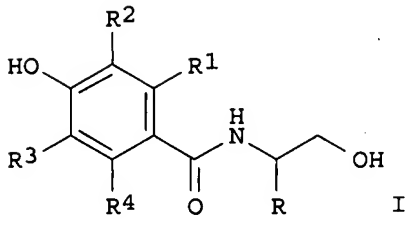
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRAI FR 2004-10098 A3 20040924
OS CASREACT 144:350402; MARPAT 144:350402
GI



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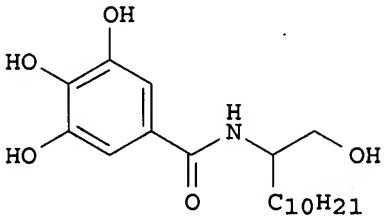

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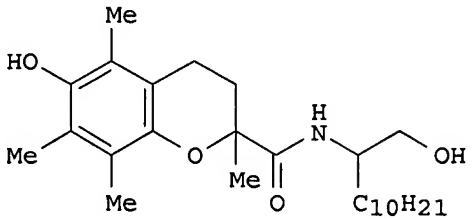

III

AB The invention relates to the preparation of compds. of formula I, comprised of a phenol moiety and a amide group derived from a 2-aminoalkan-1-ol, and their antiradical and antioxidant properties in liquid prepns. Similar benzopyran-2-carboxamide derivs. are also disclosed. These liquid mediums containing compds. of formula I can be used as active ingredients of cosmetics or pharmaceuticals to prevent biol. degradation due to free radicals. The compds are designed to retain the activity of the parent antioxidant while exhibiting improved lipid miscibility. Compds. of formula I wherein R1-R4 are independently H, OH, or C1-4 alkyl; R is C2-30 alkyl; and their process for preparation are claimed in this invention. Example compound II was prepared by amidation of gallic acid triacetate with 2-amino-1-dodecanol,

followed by acid hydrolysis with HCl, in 39% yield. The invention compds. were evaluated for their ability to inhibit radicals in vitro. Example compound II inhibited diphenyl(2,4,6-trinitrophenyl)hydrazide radical in ethanol solution, showing a 0.35 absorbance at 517 nm, indicating 70% inhibition (cf. 91% for TROLOX and 71% for Me gallate). Analogous compound III, prepared by amidation of TROLOX with 2-amino-1-dodecanol, gave 65% inhibition.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:510127 CAPLUS
DN 141:59229
TI Combinations of antioxidants containing 6,7-disubstituted 2,2-dialkylchromanes or -chromenes for cosmetic skin and hair care
IN Yuecel, Sevda; Waldmann-Laue, Marianne
PA Henkel Kommanditgesellschaft Auf Aktien, Germany
SO Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1430882	A2	20040623	EP 2003-28016	20031206
	EP 1430882	A3	20041103		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	DE 10259014	A1	20040624	DE 2002-10259014	20021216
PRAI	DE 2002-10259014	A	20021216		

OS MARPAT 141:59229
AB The invention concerns cosmetic and dermatol. formulations that contain combinations of antioxidants; 6,7-disubstituted 2,2-dialkylchromanes or -chromenes are used with other antioxidants selected from the group of flavonoids, polyphenols, catechins, ubiquinones, pentaerythritol tetrakis[3(3,5-di-tert.-butyl-4-hydroxyphenyl)propionate], urocanic acid, carotenes, ascorbic acid and derivs., isoascorbic acid and derivs., ferulaic acid, ethylferulate, caffeic acid, rosemaric acid, 2,6-di-tert.-butyl-4-methoxyphenol, tert.-butyl-4-methoxyphenol, and plant exts. Thus a formulation contained (weight/weight%): thistle oil 3.0; Myritol PC 3.5; Lanette 22 3.0; Cutina GMS-V 3.0; Stenol 16/18 2.0; isopropylstearate 6.0; Baysilon M350 1.0; Uvinul T150 2.5; polyparaben 0.2; glycerin 5.0; methylparaben 0.2; citric acid 0.1; Lipochroman-6 0.01; sodium ascorbyl phosphate 0.1; Sepigel 305 2.0; water to 100.

L5 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2003:822203 CAPLUS
DN 140:380237
TI Vitamin-hybrid drug: application of vitamin E/C hybrid drug to cosmetic materials
AU Sakaue, Takahiro; Ogino, Shinya; Iemura, Masahito; Iwasaki, Naoko
CS Lab. for Drug Discovery, Senju Pharmaceutical Co., Ltd., Japan
SO Bihada-Hifu Bogo to Baiogijutsu (2003), 363-367. Editor(s): Miwa, Nobuhiko. Publisher: Shi Emu Shi Shuppan, Tokyo, Japan.
CODEN: 69ERD9; ISBN: 4-88231-408-8
DT Conference; General Review
LA Japanese
AB A review. Characteristics of L-ascorbic acid 2-[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl-hydrogen phosphate]potassium salt (EPC-K) and 2-[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl-2-butenedioate]-L-ascorbic acid (CME) having enhanced antioxidative effect and other skin-protective effects for

applications in cosmetic materials are discussed.

L5 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:219158 CAPLUS
DN 132:269841
TI Chroman and chromene derivatives for the prevention of cell damages caused by oxidation or free radicals
IN Pons Lambiez, Fernando; Delgado Gonzalez, Raquel; Parente Duena, Antonio
PA Lipotec S. A., Spain
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2000095684	A	20000404	JP 1999-260629	19990914
ES 2154560	A1	20010401	ES 1998-1947	19980916
ES 2154560	B1	20011201		
EP 1002533	A1	20000524	EP 1999-500138	19990910
EP 1002533	B1	20021204		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AT 228836	T	20021215	AT 1999-500138	19990910
PT 1002533	T	20030430	PT 1999-500138	19990910
ES 2189372	T3	20030701	ES 1999-500138	19990910
PRAI ES 1998-1947	A	19980916		

OS MARPAT 132:269841
AB Topical and oral administration of dimethylchroman derivs. prevents the premature aging of cells caused by oxidation or free radicals. Liposomes containing 3,4-dihydro-7-methoxy-2,2-dimethyl-2H-1-benzopyran-6-ol showed significant inhibitory activities against lipid peroxidn. induced by UV-C ray. Cosmetic formulations for the protection of skin from UV ray and drink and capsule formulations with antiradical activities, are provided.

L5 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1997:372017 CAPLUS
DN 126:343809
TI Preparation of ascorbic acid tocopheryl phosphate diesters as antioxidants
IN Nakamura, Masayuki; Ogata, Kazumi; Sakaue, Takahiro; Saito, Noriko; Iemura, Masahito
PA Senju Pharmaceutical Co., Ltd., Japan
SO Eur. Pat. Appl., 10 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 768314	A1	19970416	EP 1996-116211	19961010
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CA 2186654	A1	19970414	CA 1996-2186654	19960927
US 5750516	A	19980512	US 1996-724509	19960930
JP 09165394	A	19970624	JP 1996-260831	19961001
PRAI JP 1995-265615	A	19951013		

AB This invention provides a phosphoric diester of phosphoric acid with L-ascorbic acid involving its 5-hydroxyl group and tocopherol involving its hydroxyl group or a pharmacol. acceptable salt thereof. The compound of the invention can be used with advantage as an antioxidant (radical-scavenging) agent and a prophylactic and therapeutic agent for ischemic organ disorders or in cosmetics. Thus, pyridine was

added to 2,3-di-O-benzyl-L-ascorbic acid dissolved in THF, followed by tocopheryl phosphorodichloridate in THF; the product was deprotected, isolated, and treated with 1N-KOH to provide L-ascorbic acid 5-[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl hydrogen phosphate] K salt. In in vitro autoxidn. tests of homogenized rat brain, this compound showed 98.5% inhibition of lipid peroxidn. at concns. of 10-4 M.

L5 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1996:170754 CAPLUS
DN 124:202021
TI Preparation of dihydrobenzofurans and dihydrobenzopyrans as antioxidants for cosmetics and pharmaceuticals
IN Solladie, Guy; Boeffel, Dominique; Maignan, Jean
PA Oreal S. A., Fr.
SO Eur. Pat. Appl., 27 pp.
CODEN: EPXXDW
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 685473	A2	19951206	EP 1995-400577	19950315
	EP 685473	A3	19951227		
	EP 685473	B1	19970514		
	R: DE, ES, FR, GB, IT				
	FR 2720395	A1	19951201	FR 1994-6616	19940531
	FR 2720395	B1	19960628		
	ES 2104464	T3	19971001	ES 1995-400577	19950315
	JP 08048677	A	19960220	JP 1995-107595	19950501
	US 5523319	A	19960604	US 1995-454844	19950531
PRAI	FR 1994-6616	A	19940531		

OS MARPAT 124:202021
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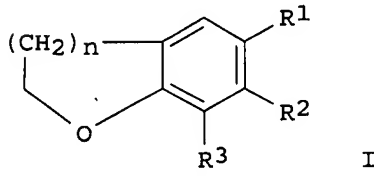

I

AB The title compds. I [n = 1 - 3; R1 = SR4, OR4; R4 = alkyl; R2 = OH, etc.; R3 = H, alkyl; a proviso is given] are claimed. 2,3-Dihydro-6-hydroxy-5-(methylthio)benzofuran (preparation given) in vitro showed antioxidant activity.

L5 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1994:272637 CAPLUS
DN 120:272637
TI Photochromic plastic containers for cosmetics
IN Watanabe, Morio
PA Nippon Carbide Kogyo Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05305005	A	19931119	JP 1992-135700	19920430

PRAI JP 1992-135700 19920430

AB The containers, especially useful for sun cream, oil, and lotion, contain a photochromic substance such that under irradiation from a UV source the containers turn black-brown and then return to their original color without the irradiation An injection-molded container was prepared from a composition containing polypropylene (J 105G) 100, diazo yellow 0.065, quinacridone 0.08, TiO2 0.5, 1',3',3'-trimethyl-6-nitrospiro(2H-1-benzopyran-2,2'-indoline) 0.05, 1,3,3-trimethylspiro[indolino-2,3'-(3H)naphth[2,1-b][1,4]oxazine] 0.005, and antioxidant 0.01 part and used to store olive oil.

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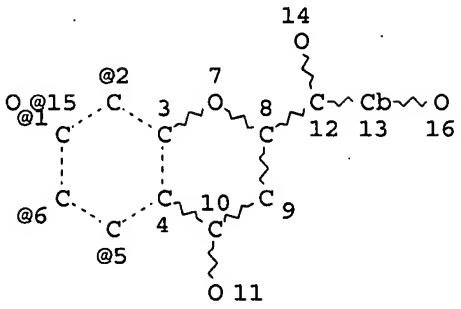


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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS  16

STEREO ATTRIBUTES: NONE


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IN   4H-1-Benzopyran-4-one, 7-hydroxy-3-(4-hydroxyphenyl)-2-[4-[2-(1-
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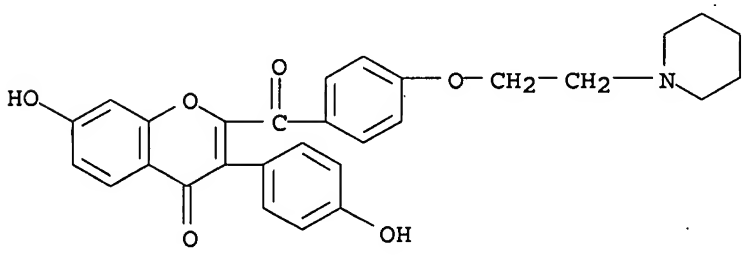

● HCl

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L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-4,10-dione, 5-methoxy-2,8-bis[(2-oxocyclopentyl)carbonyl]-, disodium salt (9CI)
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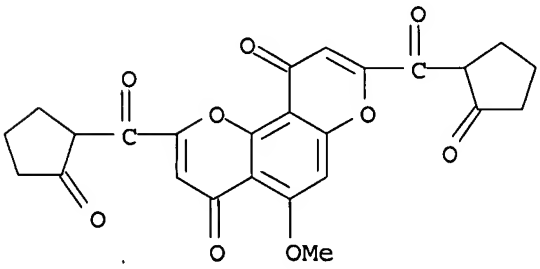

●2 Na

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H-1-Benzopyran-4-one, 2,3-dihydro-3-hydroxy-2-[2-hydroxy-4-(1-methylethoxy)benzoyl]-7-(1-methylethoxy)-2,3-diphenyl- (9CI)
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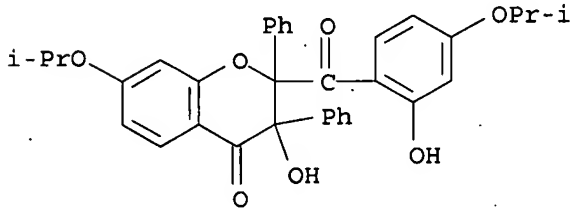

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-4,10-dione, 5-hydroxy-2,8-bis[(2-oxocyclopentyl)carbonyl]-6-(2-propenyl)- (9CI)
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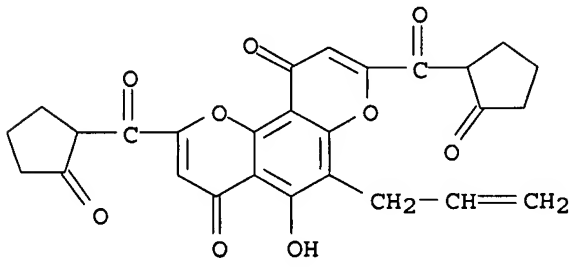
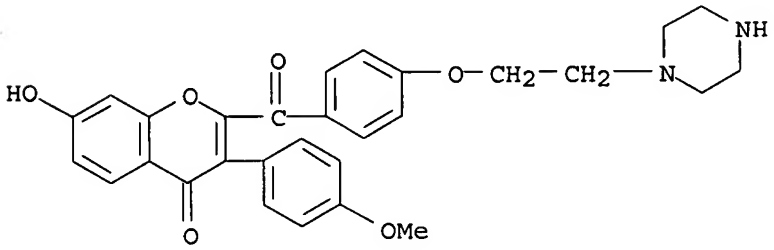


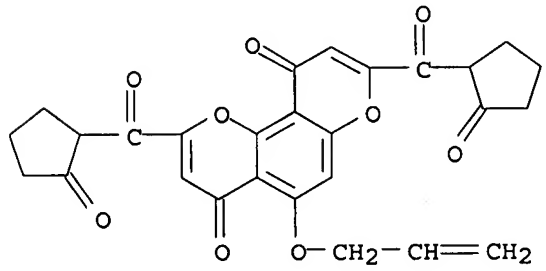
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H-1-Benzopyran-4-one, 7-hydroxy-3-(4-methoxyphenyl)-2-[4-[2-(1-piperazinyl)ethoxy]benzoyl]- (9CI)
MF C29 H28 N2 O6
CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-4,10-dione, 2,8-bis[(2-oxocyclopentyl)carbonyl]-5-(2-propenyloxy)- (9CI)
MF C27 H22 O9



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
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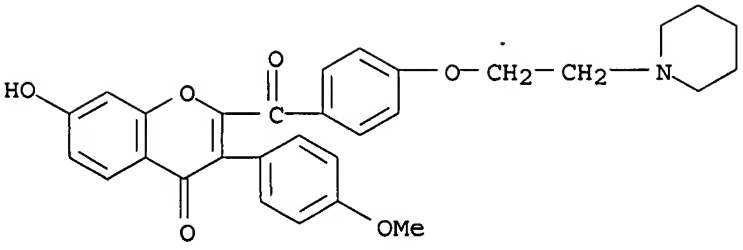
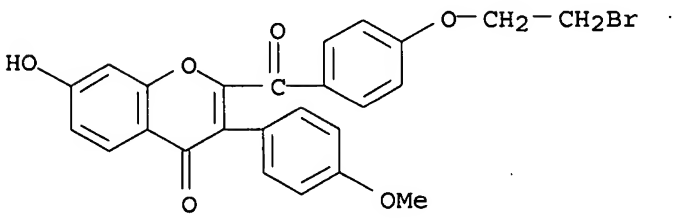
MF C30 H29 N O6
CI COM



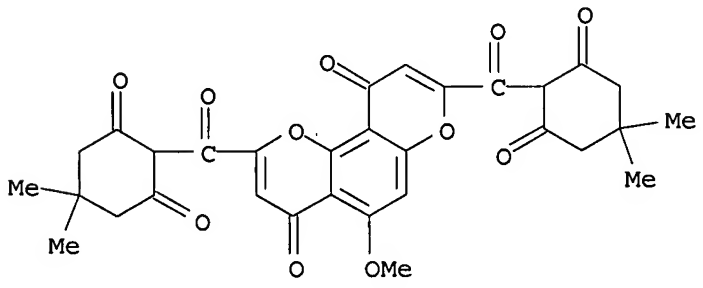
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H-1-Benzopyran-4-one, 2-[4-(2-bromoethoxy)benzoyl]-7-hydroxy-3-(4-methoxyphenyl)- (9CI)
MF C25 H19 Br O6



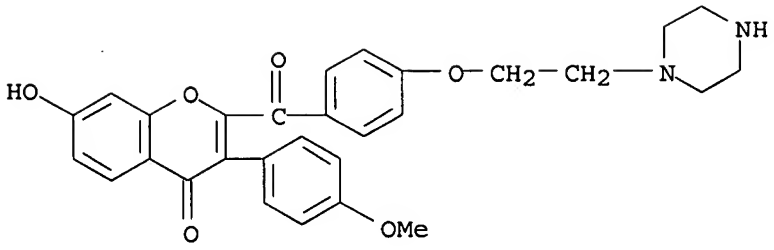
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-4,10-dione, 2,8-bis[(4,4-dimethyl-2,6-dioxocyclohexyl)carbonyl]-5-methoxy- (9CI)
MF C31 H28 O11



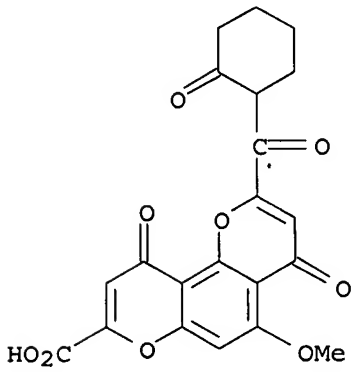
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H-1-Benzopyran-4-one, 7-hydroxy-3-(4-methoxyphenyl)-2-[4-[2-(1-piperazinyl)ethoxy]benzoyl]-, dihydrochloride (9CI)
MF C29 H28 N2 O6 . 2 Cl H



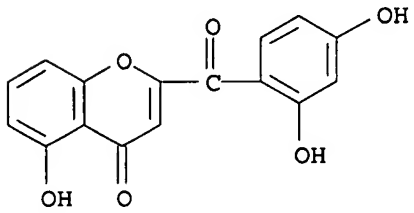
●2 HCl

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-8-carboxylic acid, 5-methoxy-4,10-dioxo-2-[(2-oxocyclohexyl)carbonyl]- (9CI)
MF C21 H16 O9



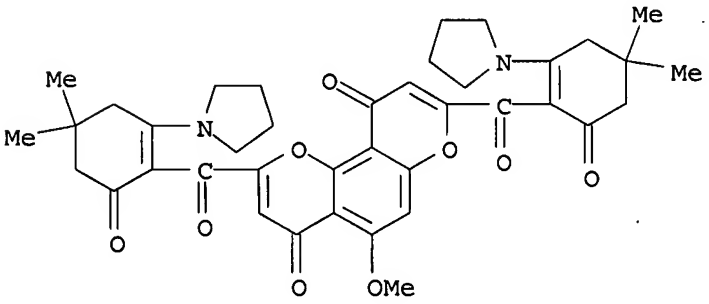
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H-1-Benzopyran-4-one, 2-(2,4-dihydroxybenzoyl)-5-hydroxy- (9CI)
MF C16 H10 O6

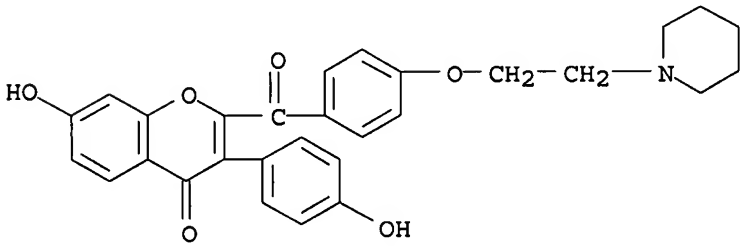


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-4,10-dione, 2,8-bis[[4,4-dimethyl-6-oxo-2-(1-pyrrolidinyl)-1-cyclohexen-1-yl]carbonyl]-5-methoxy- (9CI)
MF C39 H42 N2 O9

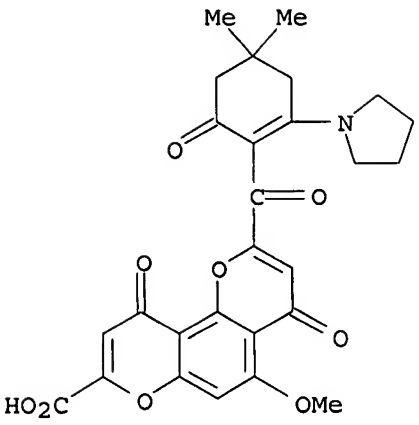


L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H-1-Benzopyran-4-one, 7-hydroxy-3-(4-hydroxyphenyl)-2-[4-[2-(1-piperidinyl)ethoxy]benzoyl]- (9CI)
MF C29 H27 N O6
CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

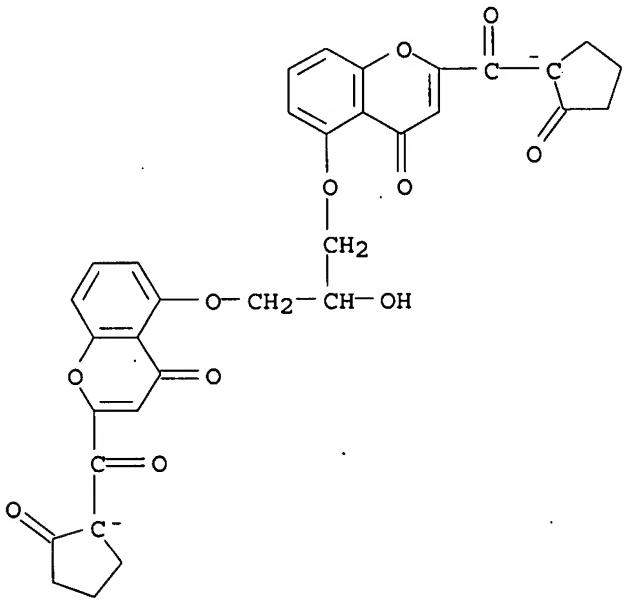
L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-8-carboxylic acid, 2-[[4,4-dimethyl-6-oxo-2-(1-pyrrolidinyl)-1-cyclohexen-1-yl]carbonyl]-5-methoxy-4,10-dioxo-, sodium salt (9CI)
MF C27 H25 N O9 . Na



● Na

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H-1-Benzopyran-4-one, 5,5'-[(2-hydroxy-1,3-propanediyl)bis(oxy)]bis[2-[(2-oxocyclopentyl)carbonyl]-, ion(2-), disodium (9CI)
MF C33 H26 O11 . 2 Na

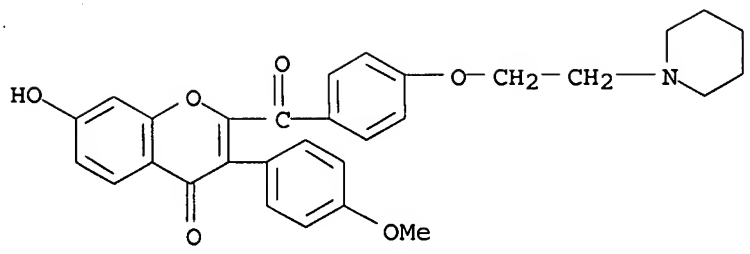
PAGE 1-A



PAGE 2-A

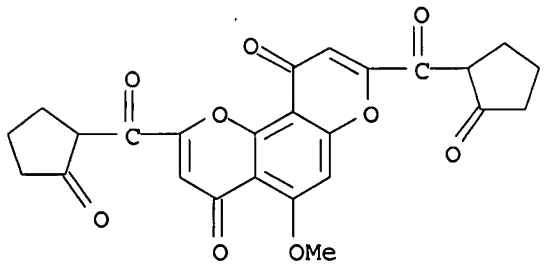
● 2 Na^+

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H-1-Benzopyran-4-one, 7-hydroxy-3-(4-methoxyphenyl)-2-[4-[2-(1-piperidinyl)ethoxy]benzoyl]-, hydrochloride (9CI)
MF C30 H29 N O6 . Cl H



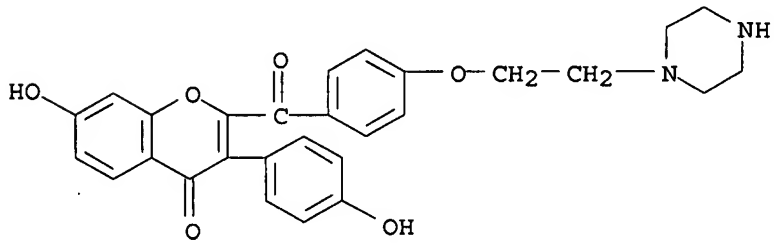
● HCl

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-4,10-dione, 5-methoxy-2,8-bis[(2-oxocyclopentyl)carbonyl]- (9CI)
MF C25 H20 O9
CI COM



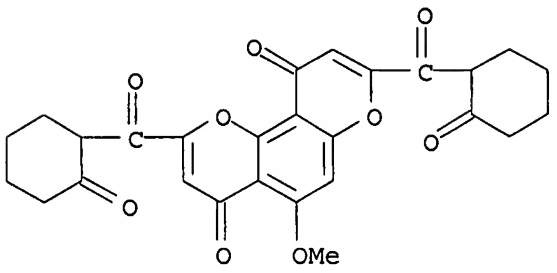
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H-1-Benzopyran-4-one, 7-hydroxy-3-(4-hydroxyphenyl)-2-[4-[2-(1-piperazinyl)ethoxy]benzoyl]-, dihydrochloride (9CI)
MF C28 H26 N2 O6 . 2 Cl H



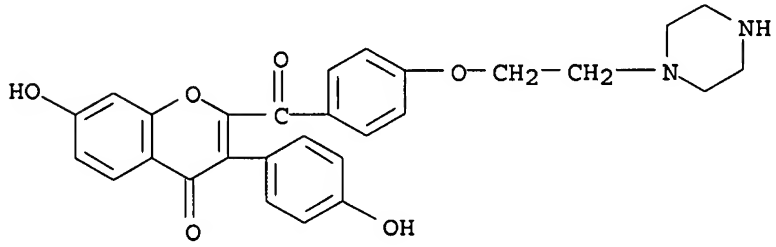
●2 HCl

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-4,10-dione, 5-methoxy-2,8-bis[(2-oxocyclohexyl)carbonyl]- (9CI)
MF C27 H24 O9



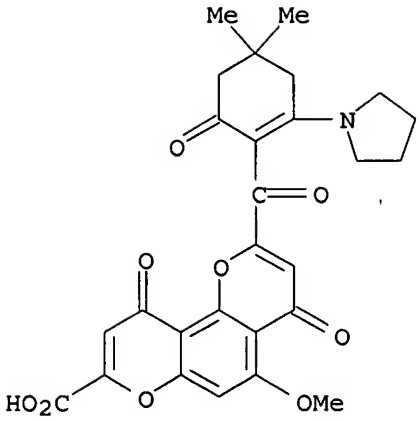
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H-1-Benzopyran-4-one, 7-hydroxy-3-(4-hydroxyphenyl)-2-[4-[2-(1-piperazinyl)ethoxy]benzoyl]- (9CI)
MF C28 H26 N2 O6
CI COM

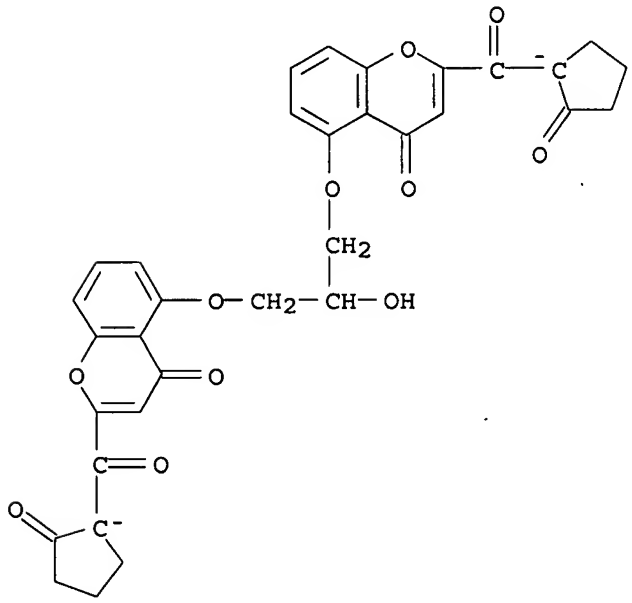


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

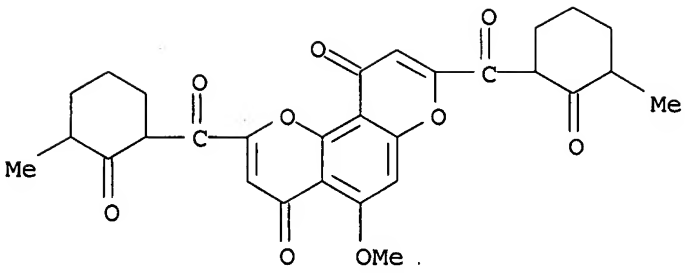
L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-8-carboxylic acid, 2-[[4,4-dimethyl-6-oxo-2-(1-pyrrolidinyl)-1-cyclohexen-1-yl]carbonyl]-5-methoxy-4,10-dioxo- (9CI)
MF C27 H25 N O9
CI COM



L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H-1-Benzopyran-4-one, 5,5'-[(2-hydroxy-1,3-propanediyl)bis(oxy)]bis[2-[(2-oxocyclopentyl)carbonyl]-, ion(2-) (9CI)
MF C33 H26 O11
CI COM

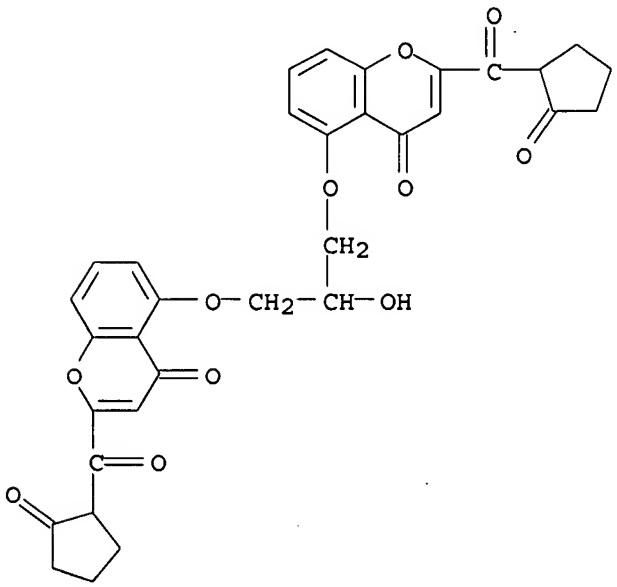


L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-4,10-dione, 5-methoxy-2,8-bis[(3-methyl-2-oxocyclohexyl)carbonyl]- (9CI)
MF C29 H28 O9



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 25 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4H-1-Benzopyran-4-one, 5,5'-[(2-hydroxy-1,3-propanediyl)bis(oxy)]bis[2-[(2-oxocyclopentyl)carbonyl]- (9CI)
MF C33 H28 O11



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

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L8           1 C16 H10 O6/MF  AND L7

=> fil caplus
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         5.40     186.38

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=> s l8
L9           1 L8

=> d bib abs hitstr

L9   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2007 ACS on STN
AN   2004:466702  CAPLUS
DN   141:38528
TI   Preparation of 2-benzoylchromone derivatives as inhibitors of the tyrosine
     kinase
IN   Mujica-Fernaud, Teresa; Buchholz, Herwig; Carola, Christophe; Sirrenberg,
     Christian; Rautenberg, Wilfried
PA   Merck Patent G.m.b.H., Germany
SO   Ger. Offen., 22 pp.
     CODEN: GWXXBX
DT   Patent
LA   German
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
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PI   DE 10256174          A1    20040609    DE 2002-10256174        20021202
     EP 1426378           A1    20040609    EP 2003-25849           20031111
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     US 2004176440        A1    20040909    US 2003-725349          20031202
PRAI DE 2002-10256174     A     20021202
OS   CASREACT 141:38528; MARPAT 141:38528
GI
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB New compds. I [R = OH, OA, OPh, Ar, OC(:O)A, SO3H, SO3A, OSO3H, OSO3A, OSO2A, SO2A, halogen (F, Cl, I, Br), CO2H, CO2A, CONH2, NHSO2A, COA, CHO, SO2NH2; RR = OCH2O, OCH2CH2O; A = (un)branched C1-10-alkyl, C1-10-fluoroalkyl; Ar = (un)substituted Ph; X = OH; XX = OCH2O, OCH2CH2O; n = 1 - 4; m = 1 - 5], their pharmaceutically acceptable derivs., solvates and stereoisomers, are inhibitors of the tyrosine kinase and can for the treatment by tumors, to the neuroprotection and for the protection of the stress proteins of the skin is used. The procedure for the preparation of I is characterized by: (a) hydroxyacetophenones II are cyclized with AOC(:O)C(:O)OA (A = C1-6-alkyl) to chromones III ; (b) hydrolysis of III to acid IV; (c) chlorination to acid chloride V ; (d) Friedel-Crafts acylation of PhRm. Thus, 5-Hydroxy-2-(2,4-dihydroxybenzoyl)chromone (VI) was prepared from 2,6-dihydroxyacetophenone via cyclocondensation with (EtO2C)2, hydrolysis with aqueous HCl in MeCO2H, chlorination with with (COCl)2 in CH2Cl2 containing catalytic DMF, then Friedel-Crafts acylation of resorcinol in THF containing AlCl3. Several drug dosage formulations are presented.

IT 700818-24-2P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 2-benzoylchromone derivs. as inhibitors of the tyrosine kinase)

RN 700818-24-2 CAPLUS

CN 4H-1-Benzopyran-4-one, 2-(2,4-dihydroxybenzoyl)-5-hydroxy- (9CI) (CA INDEX NAME)